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HARYANA

Att. Samit Chaudhari

REPORT ISSUED BY THE RESEARCH ASSOCIATION OF THE TEXTILE
INDUSTRY, AITEX
N° 2018ID0023

Rev. 2.

*This revision cancels
and replaces the
previous*

1/23

The test was carried out at :High Current Laboratory located at Polígono Industrial Fuente del Jarro. C/ Ciudad de Gibraltar, 5; 46988 - Paterna (Valencia); which property is shared at 50% between research institutes AITEX and ITE

Applicant

HONEYWELL INTERNATIONAL INDIA PVT. LTD.

Date of reception

06/04/2018

Data test

Starting: 12/04/2018

Ending: 13/04/2018

Identification of samples

- "Honeywell Arc Protection 40 CAL/CM2 StandardHood #IINFH40BL"

Test Carried out

- ELECTRIC ARC EXPOSURE TEST: DETERMINATION OF THE ARC RATING FOR EYE OR FACE PROTECTIVE PRODUCTS / *Test results*

RESULTS

ELECTRIC ARC EXPOSURE TEST: DETERMINATION OF THE ARC RATING FOR EYE OR FACE PROTECTIVE PRODUCTS

Test results

The test program includes minimum of twenty individual panel arc trials.

The following test data was recorded for each trial:

Arc exposure electrical conditions: arc trial number, RMS arc current, peak arc current, arc voltage, arc duration, energy dissipated in arc, plots of arc current and arc voltage.

Temperature rise response from two monitor sensors for each panel in each trial, plot of average responses from two monitor sensors.

Pictures after arc exposure.

Video.

Essential test data and test results are presented in the following pages as follows:

Arc rating: ATPV or E_{BT50} or both and plots of the burn injury probability (ATPV) or break open probability (E_{BT50}) or both versus E_i .

Heat attenuation factor (HAF) and plot of HAF on E_i .

Test specimen description and order of layer.

Distance from an arc center line to the panel surface.

Subjective evaluation.

Pictures after arc exposure.

Ignition probability value (if determined during testing).

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RESULTS

Standard

ASTM F2178 – 17

| Test conditions | |
|---|--------------|
| Date test | 13/04/2018 |
| Arc current | (8 ± 1) kA |
| Stainless steel electrodes, gap of the electrodes | (300 ± 5) mm |
| Distance between the electrodes and sample | (300 ± 5) mm |
| Fuse wire | 0.5 mm |
| Number of samples tested | 20 |

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RESULTS

Tested material pictures:

Original



Shot 1



Shot 2



Shot 3



Shot 4



Shot 5



Shot 6



Shot 7



Shot 8



Shot 9



Shot 10



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RESULTS

Summary of results Lens / Window:

| | |
|------|--------------------------|
| ATPV | 63,8 cal/cm ² |
| HAF | 97,3 % |

Summary of results Fabric:

| | |
|------|--------------------------|
| ATPV | 43,3 cal/cm ² |
|------|--------------------------|

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Lucia Martinez
Head of PPE and Ballistics department

Digitally signed by LUCIA MARTINEZ
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Laboratories:

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